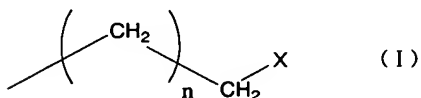


## Claims

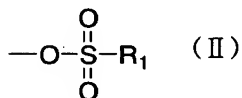
1. A process for the production of sulfoalkyl-containing polymers characterized by subjecting a polymer having a side chain containing a leaving group X represented by the structural formula (I):



[wherein X is a leaving group, and n is an integer of 0 to 6] to substitution of X with an acylthio group, and then oxidizing the acylthio group into a sulfonic group.

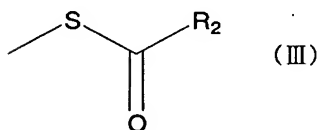
2. The process for the production according to Claim 1, wherein n in said side chain (I) is 0,

3. The process for the production of sulfoalkyl-containing polymers according to Claim 1 or 2, wherein a leaving group X is Cl, Br, I or a substituent represented by the following formula (II):



[wherein R<sub>1</sub> is an alkyl group having 1 to 6 carbon atoms, a perfluoro(C<sub>1</sub>-C<sub>3</sub>)alkyl group or an aryl group],

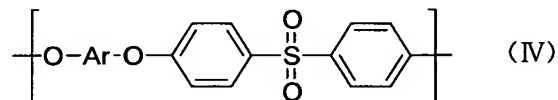
4. The process for the production of sulfoalkyl-containing polymers according to any of Claims 1 to 3, wherein an acylthio group represented by the following formula (III):



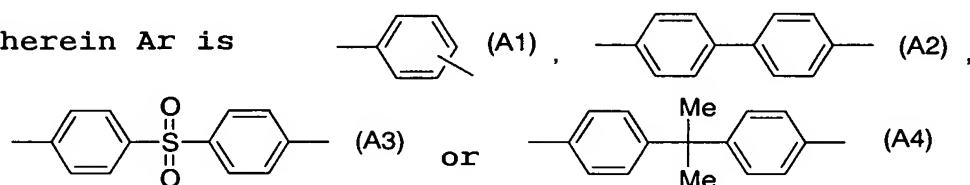
[wherein R<sub>2</sub> is an alkyl group having 1 to 6 carbon atoms or an

aryl group],

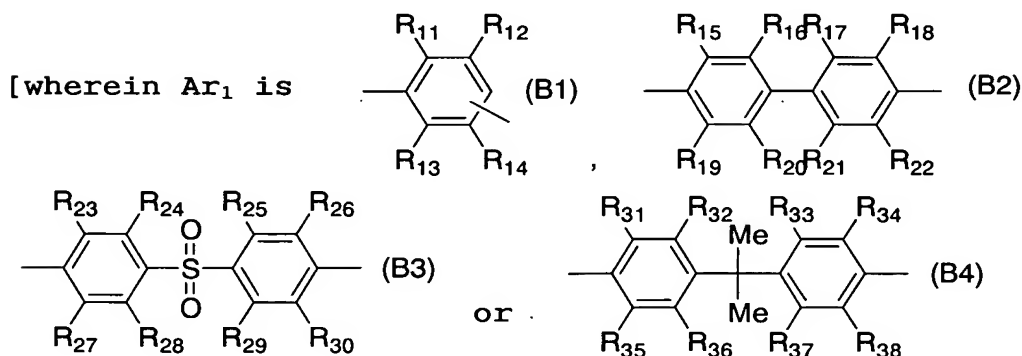
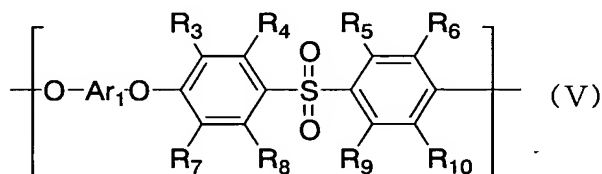
5. The process for the production of sulfoalkyl-containing polymers according to anyone of Claims 1 to 4, wherein the backbone structure of the polymer having a side chain (I) is a polysulfone structure represented by the following formula (IV):



wherein Ar is

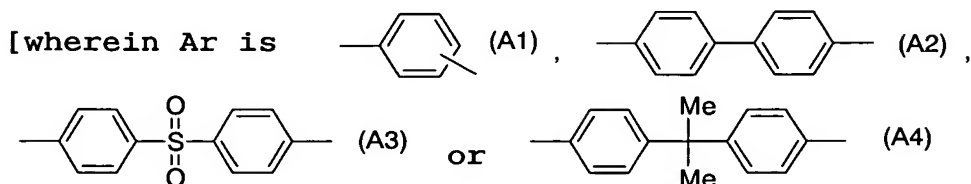
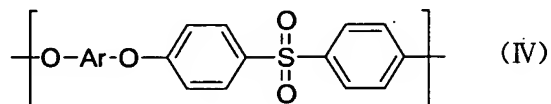


6. A process for the production of sulfomethylated polysulfone, represented by the following formula (V):



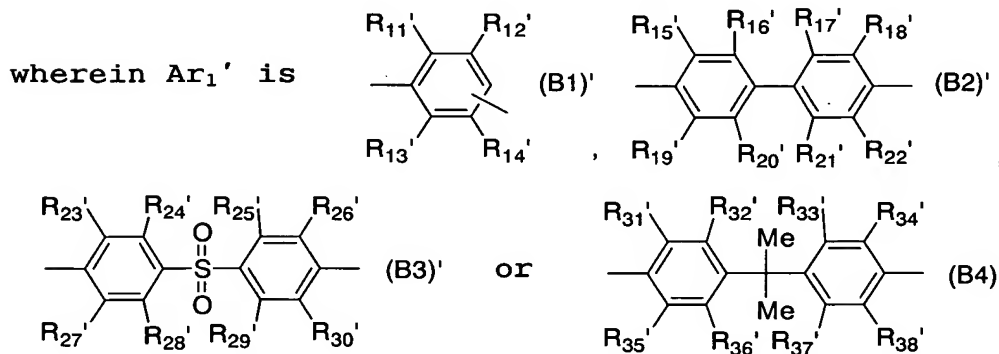
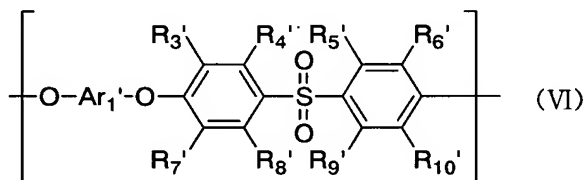
R<sub>3</sub> - R<sub>38</sub> independently is a hydrogen atom or a sulfomethyl group],

characterized by subjecting an aromatic ring of a polysulfone polymers represented by the following formula (IV):



, to (a) chloromethylation, (b) then subjecting the formed chlorine to acetylthiolation, followed by further oxidation to be converted into a sulfonic group.

7. An acetylthiomethyl-containing polysulfone, represented by the following formula (VI):



R<sub>3</sub>' to R<sub>38</sub>' independently is a hydrogen atom, or 